

Amendment to the Claims:

Please cancel claims 1-45 and replace with new claims 46-78.

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

46. (New) A method of copying a copy protected optical disc, the method comprising the steps of reading data from an optical disc at a selected level which differs from the user data level, and writing the data read from said selected level to an optical disc to create a usable copy of a copy protected optical disc, wherein the data levels at least comprise, from highest to lowest, the user data level, a data frame level, an error corrected level, an interleaved level, and an encoded data level, and wherein the data is read from the optical disc at the error corrected level without any error correction codes, or from one of the other levels above the encoded data level but below the user data level, and further comprising writing the read data to an optical disc, the writing step commencing at a data level which corresponds to the data level from which the data has been read and the writing step continuing down through the data levels to produce resultant encoded data in the form of a bit stream, which bit stream is written to the optical disc.

47. (New) A method of copying a copy protected optical disc according to Claim 46 further comprising reading the data from the error corrected level without any error correction codes, and wherein the writing step involves generating error correction codes for the read data.

48. (New) A method of copying a copy protected optical disc according to Claim 47 wherein writing the read data to an optical disc comprises interleaving the read data together with the error correction codes, encoding the interleaved data in accordance with EFM Plus encoding and writing the resultant bit stream to the optical disc.

49. (New) A method of copying a copy protected optical disc according to Claim 46, further comprising reading the data from the optical disc at the data frame level.

50. (New) A method of copying a copy protected optical disc according to Claim 49, wherein the data is read from the data frame level without any additional codes, and the writing step involves generating additional codes for the read data.

51. (New) A method of copying a copy protected optical disc according to Claim 50, wherein the additional codes generated include sector numbers.
52. (New) A method of copying a copy protected optical disc according to Claim 49, wherein the data is read from the data frame level together with any additional codes.
53. (New) A method of copying a copy protected optical disc according to Claim 49, wherein writing the read data to an optical disc comprises scrambling and subsequently error correcting the read data together with the additional codes, interleaving the error corrected data, encoding the interleaved data in accordance with EFM Plus encoding and writing the resultant bit stream to the optical disc.
54. (New) A method of copying a copy protected optical disc according to Claim 46, further comprising reading the data from the optical disc at the interleaved level.
55. (New) A method of copying a copy protected optical disc according to Claim 46, further comprising the step of creating a Lead-In for the optical disc being written.
56. (New) A method of copying a copy protected optical disc according to Claim 55, wherein the created Lead-In specifies the physical characteristics and/or manufacturing information for the optical disc being written.
57. (New) A method of copying a copy protected optical disc according to Claim 46, wherein the optical disc being written has a Lead-In, and further comprising the step of specifying physical characteristics for the optical disc being written and writing the specified physical characteristics to the Lead-In on the optical disc.
58. (New) A method of copying a copy protected optical disc according to Claim 46, wherein the optical disc being written has a Lead-In, and further comprising the step of specifying manufacturing information for the optical disc being written and writing the specified manufacturing information to the Lead-In on the optical disc.
59. (New) A method of copying a copy protected optical disc according to Claim 46, wherein the optical disc being written has a Lead-In, and further comprising the step of enabling reading and writing of discs using absolute sector addresses, and using the absolute sector

addresses to read the entire data in a Lead-In of a copy protected optical disc, and writing the data read from the Lead-In to a Lead-In of the optical disc being written.

60. (New) A method of copying a copy protected optical disc according to Claim 46, further comprising the step of enabling reading and writing of discs using negative relative sector addresses, and using the negative relative sector addresses to read the entire data in a Lead-In of a copy protected optical disc, and writing the data read from the Lead-In to a Lead-In of the optical disc being written.

61. (New) Apparatus for copying optical discs, the apparatus comprising pickup means to detect the data carried on an optical disc, decoding means for decoding the detected data, de-interleaving means for arranging the decoded data into an ECC block, and error correction decoding means for determining error corrected data from said ECC block, and unscrambling means for unscrambling the determined error corrected data and forming a data frame, and the apparatus further comprising means for writing detected data onto an optical disc, the writing means comprising scrambling means for scrambling the formed data frame, error correction encoding means for encoding said data frame to form an ECC block, interleaving means for interleaving the data in the ECC block, encoding means for encoding the interleaved data, and mastering means for representing the encoded data on an optical disc, and the apparatus further comprising a disc copying program for selecting the detected data from the ECC block, or the determined error corrected data, or the data frame and for applying the selected data to the corresponding element of the writing means, that is, respectively to the interleaving means, to the error correction encoding means, or to the scrambling means.

62. (New) Apparatus for copying optical discs according to Claim 61, wherein the data is read from the data frame without any additional codes, and the means for writing the data to an optical disc comprises means for generating additional codes for the read data to form a data frame for input to said scrambling means.

63. (New) Apparatus for copying optical discs according to Claim 61, wherein said decoding and encoding means operate in accordance with EFM Plus encoding, and wherein said mastering means comprises a laser cutter.

64. (New) Software or firmware for use with an optical disc drive to enable the copying of optical discs, the software or firmware comprising instructions for reading data from an optical disc at a selected level which differs from the user data level, and instructions to write the read

data from the selected level to an optical disc to create a copy of the disc, wherein the data levels at least comprise, from highest to lowest, the user data level, a data frame level, an error corrected level, an interleaved level, and an encoded data level, and wherein the software or firmware further comprises instructions to read the data from the optical disc at the error corrected level without any error correction codes, or from one of the other levels above the encoded data level but below the user data level, and wherein the software or firmware further comprises instructions to undertake a writing step to write the read data to an optical disc, the instructions causing the writing step to commence at a data level which corresponds to the data level from which the data has been read, and the instructions causing the writing step to continue down through the data levels to produce resultant encoded data in the form of a bit stream, and to write the resultant bit stream to the optical disc.

65. (New) Software or firmware according to Claim 64, further comprising instructions to read the data from the error corrected level without any error correction codes, and instructions to include in the writing step the generation of error correction codes for the read data.

66. (New) Software or firmware according to Claim 64, wherein the instructions for the writing step comprise instructions to interleave the read data together with the error correction codes, to form the interleaved data into physical sectors, to encode the data in the physical sectors in accordance with EFM Plus encoding and to write the resultant bit stream to the optical disc.

67. (New) Software or firmware according to Claim 64, further comprising instructions to read the data from the optical disc at the data frame level.

68. (New) Software or firmware according to Claim 67, further comprising instructions to read the data from the data frame level without any additional codes, and instructions for the writing step to include the generation of additional codes for the read data.

69. (New) Software or firmware according to Claim 68, further comprising instructions to generate additional codes including sector numbers.

70. (New) Software or firmware according to Claim 67, further comprising instructions to read the data from the data frame level together with any additional codes.

71. (New) Software or firmware according to Claim 68, wherein the instructions to write the

read data to an optical disc comprise instructions to scramble and subsequently error correct the read data together with the additional codes, to interleave the error corrected data, to form the interleaved data into physical sectors, to encode the data in the physical sectors in accordance with EFM Plus encoding, and to write the resultant bit stream to the optical disc.

72. (New) Software or firmware according to Claim 64, further comprising instructions to read the data from the optical disc at the interleaved level.

73. (New) Software or firmware according to Claim 64, further comprising instructions to create a Lead-In for the optical disc being written.

74. (New) Software or firmware according to Claim 73, further comprising instructions to specify in the created Lead-In the physical characteristics and/or manufacturing information for the optical disc being written.

75. (New) Software or firmware according to Claim 64, further comprising instructions to specify physical characteristics of the optical disc being written and to write the specified physical characteristics to a Lead-In on the optical disc.

76. (New) Software or firmware according to Claim 64, further comprising instructions to specify manufacturing information for the optical disc being written and to write the specified manufacturing information to a Lead-In on the optical disc.

77. (New) Software or firmware according to Claim 64, further comprising instructions to enable reading and writing of discs using absolute sector addresses, and to use the absolute sector addresses to read the entire data in a Lead-In of a copy protected optical disc, and to write the data read from the Lead-In to a Lead-In of the optical disc being written.

78. (New) Software or firmware according to Claim 64, further comprising instructions to enable reading and writing of discs using negative relative sector addresses, to use the negative relative sector addresses to read the entire data in a Lead-In of a copy protected optical disc, and to write the data read from the Lead-In to a Lead-In of the optical disc being written.